THE FOLLOWING ARE THE ENGLISH TRANSLATION OF ANNEXES TO THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT (ARTICLE 34):

Amended Sheets (Pages 5, 13, & 14)

The fraction and the position of the methyl branches may be determined by gas chromatography and by the customary methods.

The olefin mixture may stem from a multitude of sources and be aftertreated by suitable steps in order to exhibit the inventive branching pattern. For example, linear or selectively branched olefins may be added to a mixture, or a removal of certain olefins from the mixture may be carried out.

For example, the olefin is obtained by

a1) preparing a C_4/C_5-olefin mixture,

b1) converting the C_4/C_5-olefin mixture obtained in this way over a metathesis catalyst to prepare an olefin mixture comprising 2-pentene and/or 3-hexene and/or 3-heptene, and if appropriate removing 2-pentene and/or 3-hexene and/or 3-heptene,

c1) dimerizing the 2-pentene and/or 3-hexene and/or 3-heptene obtained in stage b1) over a dimerization catalyst to give a mixture comprising C_{10-14}-olefins and if appropriate removing the C_{10-14}-olefins.

In stage a1), the C_4-olefins of the C_4/C_5-olefin mixture may be obtained by dehydrogenating the C_4 fraction of the LPG, LNG or MTO stream and subsequently removing any dienes, alkynes and enynes formed, and the C_4 fraction of the LPG, LNG or MTO stream may be removed from the LPG, LNG or MTO stream before or after the dehydrogenation and removal of dienes, alkynes and enynes. The LNG stream may be converted to the C_4-olefin mixture via an MTO process.

In stage c1), heptenes may also be mixed in.

The olefin mixture may also be obtained by

a2) preparing a C_{5-7}-olefin mixture by dehydrogenating C_{5-7}-alkanes with upstream or downstream isomerization if appropriate,

b2) dimerizing the C_{5-7}-olefin mixture obtained in stage a2) over a dimerization catalyst to give a mixture comprising C_{10-14}-olefins and if appropriate removing the C_{10-14}-olefins.